

REMARKS

I. Comments Regarding the "Summary of the Invention" Section

The Office Action requests "a concise explanation of the invention defined in the claims involved in the Appeal, which shall refer to the specification by page and line number and to the drawings if any ...". During a telephone conference on June 22, Appellants' Attorney asked the Examiner to explain what information she was looking for. In response the Examiner stated that she wished the Appellants' Attorney to link the text in the Summary of the Invention section to the claims on Appeal.

Claims 1-10 are the subject of the pending Appeal. Of these claims, claims 1 and 5 are independent claims. For purposes of responding to the present Office Action, Appellants will direct their comments to claims 1, 5 and 6.

In part, claim 1 reads as follows:

1. A method of dynamically establishing restorable paths in an information network in response to arriving traffic requests, the network having a number of nodes and links between corresponding pairs of nodes, comprising:

...
distributing information to nodes in the network concerning
(a) total bandwidth reserved by each link in the network for all active paths currently defined in the network, and (b) total bandwidth reserved by each link in the network for all backup paths currently defined in the network

From claim 1, it is clear that the present invention involves a method of dynamically establishing restorable paths ... which includes, among other things, the distribution of information concerning the total bandwidth reserved

by each link for all active and backup paths currently defined in the network. For present purposes, claim 6 can also be similarly characterized. On page 2, paragraph 3, of the Appeal Brief, Appellants included text from the specification. In particular, Appellants stated:

According to another exemplary embodiment of the invention, partial routing information is used in determining backup paths. The additional information includes the total bandwidth used by the active paths, and, separately, the total bandwidth used by the backup paths. This incremental information is disseminated to nodes distributed over the network. The aggregate information is advantageous because it can be used in a distributed fashion. This allows for the effective sharing of backup paths using the aggregate information representing the aggregate link occupancy to the active paths and aggregate link occupancy to the backup paths.

Appellants respectfully submit that this text from page 2 of Appellants' brief derives support for at least independent claim 1 and dependent claim 6 and that this text indicates that a total bandwidth reserved by each link in a network for all active and backup paths is disseminated to nodes distributed over a network.

The text from page 2 of Appellants' brief was taken from pages 8 and 11 of the original specification. On page 8 beginning approximately at line 10 under the heading "Partial Routing Information" and running through approximately line 19 is the original text which formed the first part of the above-quoted page 2, paragraph 3, of Appellants' Appeal Brief. In addition, page 11 from approximately line 17 to approximately line 20 contains additional text which formed the balance of page 2, paragraph 3, of Appellants' Appeal Brief.

Regarding claim 5, the pertinent part reads as follows:

5. A method of dynamically establishing restorable paths in an information network in response to arriving traffic requests, the network having a number of nodes and links between corresponding pairs of nodes, comprising:

... selecting backup links in the network to form the backup path for restoring the formed active path after the given request has arrived, by using a maximum total bandwidth reservation among the active links selected to form the active path to determine a required bandwidth reservation for each backup link selected to form the backup path.

From the above, it can be seen that claim 5 is directed at a method of dynamically establishing restorable paths which includes, among other things, selecting backup links in a network to form backup paths for restoring active paths after a request has arrived, by using a maximum total bandwidth reservation.

The text on page 3, first paragraph, supports at least claim 5. This text indicates that no additional bandwidth needs to be reserved on the backup path if $M + b$ is less than or equal to G_{uv} , where M represents the maximum value of active reserve bandwidth for some link (i,j) in an active path, b represents the bandwidth needed, and G_{uv} represents the total backup bandwidth reserved on a link, (u,v) . In addition, this text indicates that bandwidth will need to be reserved on a backup path if $M + b$ is greater than G_{uv} . In both cases a maximum total bandwidth reservation on active links, M , is used to determine the bandwidth required by a backup link.

The text on page 3, first paragraph, of Appellants' Brief can be found at least on page 21, lines 1 through approximately 16 of the specification.

II. Comments Regarding Grouping of Claims

The Office Action also requests that the Appellants explain why the claims of each group are believed to be separately patentable. During the telephone conversation on June 22, the Examiner requested that Appellants' attorney explain why the claims were grouped as indicated in Appellants' Brief.

In the Appellants' Brief, Appellants grouped the claims into the following groups:

Group I, including claims 1-4;

Group II, including claims 5, 7-10; and

Group III, including claim 6.

With respect to Group I, claims 1-4, these claims are aimed at a method for establishing restorable paths by, among other things, distributing information concerning the total bandwidth reserved by each link for both active and backup paths. As Appellants have indicated in their Appeal Brief, Appellants do not believe that Hou anticipates this claim as Hou does not disclose the distribution step recited above.

With respect to claim 5, this claim is directed at the selection of a backup link using a maximum total bandwidth reservation which is further used to determine a required bandwidth reservation for each backup link selected to form a backup path. The use of a maximum total bandwidth reservation in claim 5 is not present within claim 1. Therefore, claim 5 may be separately patentable over Hou even if claim 1 is found to be anticipated by Hou, or vice-versa.

With respect to claim 6, claim 6 adds the distribution elements of claim 1 to the selection elements of claim 5. Therefore, even if Hou was found to anticipate claim 1's distribution step, claim 6 may not be anticipated by Hou because Hou does not disclose both a distribution and selection step. Conversely, if claim 5 is determined to be anticipated by Hou because Hou discloses a selection step, claim 6 may not be anticipated by Hou because Hou does not disclose both a selection and distribution step. Only if Hou is found to anticipate both claims 1 and 5, can it be said that Hou also anticipates claim 6.

In sum, because claim 1 is directed at least a distribution step, and claim 5 is directed to at least a selection step and claim 6 is directed to at least both distribution and selection steps, Appellants believe that these claims are separately patentable over Hou.

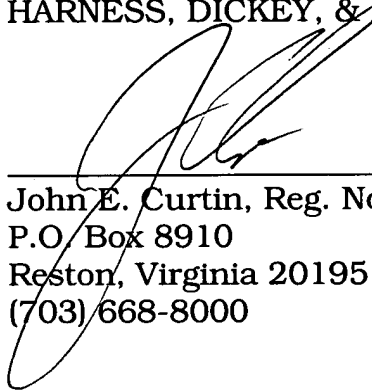
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact John E. Curtin at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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By



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